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EXAMINER

SUHOL, DMITRY

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**GROUP 3700**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 9

Application Number: 09/716,045  
Filing Date: November 20, 2000  
Appellant(s): CARL ET AL.

\_\_\_\_\_  
Dennis B. Haase  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 14 May 2003, hereinafter "brief".

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existence of any related appeals and interferences.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

No amendment after final has been filed.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

The rejection of claims 1-4 and 6-13 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

**(8) *Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) *Prior Art of Record***

6,042,490	Lenhart	3-2000
5,655,909	Kitchen et al	8-1997
5,593,352	Methfessel et al	1-1997
GB 2,062,557	Louttit	5-1981

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-4 and 6-13 are rejected under 35 U.S.C. 112 first paragraph. This rejection is set forth in prior Office Action, Paper No. 5 and is incorporated herein in its entirety by reference.

Claims 2, 4, 7, 10 and 12 are rejected under 35 U.S.C. 112 second paragraph. This rejection is set forth in prior Office Action, Paper No. 5 and is incorporated herein in its entirety by reference.

Claims 1-4 and 6-13 are rejected under 35 U.S.C. 103(a). This rejection is set forth in prior Office Action, Paper No. 5 and is incorporated herein in its entirety by reference.

**(11) Response to Argument**

First, the examiner wishes to respectfully address appellants' reasoning for the necessity of the appeal at this point in time. On page 14 of the brief, first complete paragraph appellants state that in the last office action (paper no. 5) the examiner finds the appellants arguments moot in light of new grounds of rejection and that although the examiner "acknowledges that the grounds for rejection are new, he made the office

action final, which effectively frustrates Applicants' response options and resulted in the generation of this appeal." While acknowledging appellants right for an appeal after two office actions, the examiner respectfully points out that this statement is clearly erroneous. The last office action (paper no. 5) never states that the action is final, in fact it clearly states in form PTO-326 that the office action is Non-Final, therefore it is believed that the reasoning of why this appeal was needed at this time is clearly in error.

I now turn to appellants' arguments with respect to rejections under 35 USC 112, first paragraph, beginning in the middle of page 6 of the brief. Appellants' argue that it is not required to know why a particular phenomenon takes place, only that it takes place and that the examiner's position "that the fans create turbulent eddies is an apparent effort to find fault with the claims, when no other basis can be found." In response the examiner points out that the achievement of laminar flow is dependent upon a variety of variables such as viscosity, a velocity gradient and density of the fluid and the diameter and length of the flow chamber (wind tunnel) all of which correlate to a Reynolds number and that in order to achieve a laminar flow of air with sufficient force to hold up a human being would require a great deal of thought, experimentation and calculation, none of which seems to be implied in the specification. The examiner further points out that the appellants contemplated fan structure (as shown in figure 3) shows a side by side relationship of multiple fans which would most certainly create a series of turbulent eddies rather than laminar flow. Therefore it is the examiners position that the appellants have not fulfilled the obligations under 35 USC 112 first paragraph of

providing a written description of the invention and the manner of making it in full, clear and concise terms as to enable any person skilled in the art to which it pertains to make and use the same.

The appellants' further argue in the first full paragraph in the middle of page 6 of the brief, that it is clear that the camera of the appellants' invention is to be outside the air stream. In response the examiner would like to point out that the original claims and the specification do not contemplate that the camera is outside the air stream, therefore such a limitation clearly presents new matter. Additionally the examiner points to figures 1 and 3 as showing a camera in what would appear to be a column of air.

The appellants' next argument begins in the last paragraph on page 7 of the brief. According to the appellants there is sufficient support for "all existing goals being recessed within said wall" on page 9 (of the specification), beginning on line 13 and "since the goals are apertures, as distinguished from goals in the nature of a basketball goal or a soccer goal, they do not protrude into the air stream." In response the examiner points out that the specification, and figures 1 and 3, describe a false wall (30) (in addition to a primary wall (14)), which contains the "goals" of the appellants invention. Therefore it is the examiners position that the "goals" of the appellants' invention are provided on a secondary false wall and not on a primary wall as currently claimed, in which case the phrase "all existing goals being recessed within said wall", where the said wall is the primary wall, is considered new matter and not supported by the specification.

For the reasons noted, the appellants' arguments with respect to rejections under 35 USC 112, first paragraph should be rejected.

Now to the appellants' arguments based upon prior art, rejected under 35 USC 103(a) beginning on page 9 in the first full paragraph of the brief. The appellants' argue that the wall of Kitchen '909 does not appear to be smooth and that the examiner's position that varying the speed of the fan will change the column of air at various points along the tunnel is not what the appellants disclose. In response the examiner points out that as seen figures 2 and 3 the primary inside wall (22) is shown to be smooth such that a column of air can move in a laminar flow in at least an upstream portion, where the lower portion of the wall shown in fig. 2 below the flyer is shown as a smooth wall thus allowing a laminar flow of air. Regarding the claimed limitation that the column of air is variable within the chamber, the examiner points out that it is not the appellants disclosure that is in question but rather the claimed limitation, therefore it is the examiners position that the column of air of the Kitchen '909 reference is variable through a variety of means, including but not limited to, varying the speed of fan blades. Appellants' further argue that nothing in Kitchen '909 or Larsen '361 suggests the value of laminar flow or the capability of either of the patents to create such flow. In response the examiner points out that Larsen '361 clearly teaches a device for providing a laminar flow of air for an amusement device like that of Kitchen '909 (see Larsen col. 1, lines 23-25 and col. 3, lines 40-42). The examiner further points out that Larsen clearly discusses the pit falls of turbulent air in such devices (col. 1, lines 43-50) and the

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benefits/motivation for using his device col. 3, lines 35-45. At the top of page 10 Appellants' appear to argue hindsight. In response the examiner points out that it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In this case Larsen clearly demonstrates the pit falls of turbulent flow in a free-fall recreation device (like that of Kitchen) and provides a solution with his invention, thus the combination of the two references would not be hindsight but rather a proper combination obvious to an artisan having ordinary skill in the art.

Appellants' next arguments start in the middle of page 10 of the brief. Appellants' appear to argue that Methfessel does not provide a value of providing laminar flow and that Methfessel can not support one or more flyers. Once again the examiner points that Larsen provides the motivation/value and the solution for creating laminar flow in a device of Methfessel (see above response to the Kitchen and Larsen combination). In response to appellants' arguments with respect of support of one or more flyers, the examiner points out that the claim language in question clearly states "one or more flyers", using alternative language in which case using the broadest possible interpretation in the art the examiner equates one with "one or more". In other words, the examiner defines the language "one or more" as being the same as at least one.



Appellants' next arguments begin at the top of page 11 of the brief. Appellants' appear to be arguing the case of obviousness for the combination of Kitchen, Larsen in view of Methfessel. The combination of Kitchen and Larsen has been addressed above, while the addition of the Methfessel reference is to provide a camera (see Methfessel col. 10, lines 9-13) in a device like that of Kitchen, for the purpose of recording the users activities in the simulator.

In the middle of page 11 of the brief appellants' argue that Kitchen uses a backpack on the flyer as a projector while the appellants invention utilizes a stationary projector and that the addition of blue screen technology does not render the claim unpatentable. In response the examiner, first, points out that a projector is not claimed by the appellants, therefore the argument with respect to the location of the projector does not appear to be germane to the last rejection. Examiner further points out that the use of blue screen technology and a projector system, as disclosed by Kitchen, are known equivalents in the virtual reality art, where both are well known to be used in place of each other (i.e. environments such as special effects for movies).

At the bottom of page 11 of the brief the appellants' appear to argue that it would not have been obvious to combine the teachings Methfessel and Larsen in view of Louttit. In response the combination of Methfessel and Larsen has been addressed above, while the addition of the Louttit reference provides a teaching of a free fall simulator utilizing a plurality of variable speed contiguous fans for the purpose of regulating air speed and extending equipment life (see Louttit page 2, lines 6-11).

In the middle of page 12 of the brief the appellants' argue that "the structure of Lenhart is such that laminar flow is a virtual impossibility" and that Lenhart does not teach or suggest of where or how to place the appellants' goals in accordance with the claims. In response the examiner points out that Lenhart is not relied upon to teach laminar flow but only the use of goals being recessed in a primary wall defining a chamber (see Lenhart figures 1-2 and 6, elements 36) in a free fall simulator for the purpose of providing an amusing game environment (see Lenhart col. 3, lines 40-42) while at the same time providing another teaching of a series of contiguous fans (elements 42) for the purpose of providing additional air support to the users while providing the ability to regulate air flow (see Lenhart col. 6, lines 54-61).

Appellants' last argument appears to imply that the last rejection (paper no. 5) is "without any factual basis" other than the examiners own personal view of the matter. In response the examiner points to all of the above stated responses (including explicit statements found in the prior art) as to why the appellants invention is not novel and not adequately disclosed.

For the above reasons, it is believed that the rejections under 35 USC 103(a) should be sustained.

In response to the appellants' arguments with respect to the rejections under 35 USC 112, second paragraph, beginning at the top of page 8 of the brief, the examiner points out the following reasoning for the rejections:

Regarding claim 2, the structural features of "...diameter of said column of air is variable within said chamber..." can't be determined. It is unclear what features make the column of air variable (i.e. is the diameter varied through a reduction of air speed of the fan(s), providing baffles/obstructions or are the physical properties of air varied to provide a different size column).

Regarding claim 4, the phrase "optionally provided" is not a positive limitation, therefore it is unclear if the applicants intend to claim the feature.

Regarding claims 7 and 12, the structural features/relationships encompassed by the phrase "certain ones of the fans being turned off so that the only ones of said fans being operated are within the then current diameter of said chamber" renders the claim indefinite. It is unclear as why some of the fans would be turned off since the claim is dependent from claim 1 which claims only one chamber with one diameter, therefore it would stand to reason that all the fans remain on. Furthermore it is unclear if the applicant is trying to claim some sort of an on/off mechanism or is just claiming a series of non-operational fans.

Regarding claim 10, there is no antecedent basis for "said inner wall". The claim is dependent from claim 6, which is dependent from claim 1. Neither of the claims, 1 nor 6, describe an inner wall. They only describe a primary and a secondary wall.

Regarding claim 13, the structural features encompassed by a "curtain wall" can't be determined. It is unclear as to what a "curtain wall" is (i.e. is it a wall made of a fabric or a wall made to resemble a curtain? And if it is a wall made of fabric how would it stay in place in an extremely windy environment?)

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For the reasons noted above, the appellants' arguments with respect to the indefiniteness rejection should be rejected.

Respectfully submitted,

Dmitry Suhol  
Examiner  
Art Unit 3712

May 29, 2003

Conferees  
Derris Banks, Paul Sewell, and Dmitry Suhol

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